

## **ENVIRONMENTAL REVIEW OF FISH INTRODUCTION**

### **MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS REGION 7 - MILES CITY**

#### **Description of project:**

Sauger numbers have seen an overall decline in the Missouri and Yellowstone River drainages in Montana. Possible reasons for the decline in sauger numbers include: river flows and reservoir water levels, migratory barriers/ habitat loss, hybridization with walleye, species interactions and overexploitation.

Sauger, a native species and species of special concern, is the primary sport fish in the lower Yellowstone River. Concern over their well-being has prompted a reduction in the angler limit to one fish above Cartersville Diversion, a major fish barrier, on the Yellowstone River at Forsyth, MT. Until fish passage is provided at the Cartersville Diversion, upstream movement of sauger will be limited.

Tongue River originates in the Big Horn Mountains of Wyoming, flows generally northward into Montana, and enters the Yellowstone River at Miles City, MT. The lower twenty miles of Tongue River (below T & Y Diversion Dam) was an important sauger spawning stream in the 1970's. In the last twenty-five years sauger spawning in this stretch of river has been very limited due to low flows resulting from water management practices, irrigation demand and drought. Above the T & Y Diversion Dam flows are adequate to support sauger, but the dam prevents any upstream movement. Discussions are ongoing to try and provide fish passage at this structure and adequate downstream flows.

Tongue River Reservoir is a 3,600 acre irrigation storage reservoir located near Decker, MT. It has a heavily utilized sport fishery based on black and white crappie, smallmouth bass and walleye. Sauger appeared in the reservoir in 1973 and were common in the reservoir through the 1970,s. This likely resulted from the state of Wyoming planting sauger in Tongue River near the Wyoming-Montana state line in about 1967. Today a remnant sauger population exists in the reservoir and river above the reservoir.

The Bighorn River originates in the Big Horn and Wind River Mountains in Wyoming and flows north into Montana. It enters the Yellowstone River just downstream of the town of Custer. Historically the Bighorn River was a warm silty prairie stream and was an important sauger spawning stream. Yellowtail Dam, completed on the upper Bighorn River in Montana in 1966, changed the flow patterns and characteristics of the lower Bighorn River. These changes, combined with fish passage problems at Cartersville Diversion Dam have significantly reduced the number of sauger utilizing the Bighorn River.

The Clarks Fork of the Yellowstone originates in the Absaroka Mountains in Wyoming and flows east and north into Montana entering the Yellowstone River just downstream of Laurel. The Clarks Fork is another warm, silty prairie stream that probably provided important sauger spawning habitat for Yellowstone River Fish. Fish passage problems at Cartersville Diversion and Huntley Dam, about 9 miles downstream of Billings, have severely limited access to the Clarks Fork since the early 1930s. Fish passage is now being developed at Huntley Dam, and if fish passage is eventually completed at Cartersville, the Clarks Fork could again become an important sauger stream.

The Department proposes to plant sauger in the Yellowstone River above Cartersville Diversion Dam, the Tongue River and Tongue River Reservoir, the Bighorn River, and the Clarks Fork River to augment existing populations that are limited due to migration barriers and spawning habitat. Eggs will be collected from wild Yellowstone River sauger, raised to the fry and fingerling stage at the Miles City State Fish Hatchery and stocked in the Tongue River drainage and/or Yellowstone River drainage above the Cartersville Diversion Dam. The purpose of this action is to augment sauger populations where they are limited within their native range in the Yellowstone, Tongue, Bighorn, and Clarks Fork River drainages, determine if stocking can be used to improve sauger populations and enhance an important native cool water game fish species.

**Fish species proposed for introduction:**

Sauger

**Name of water(s) to be stocked:**

Yellowstone River: Cartersville Diversion Dam to the mouth of the Clarks Fork River

**Counties:** Rosebud, Treasure, Yellowstone  
River Mile 237.4 to River Mile 379.2

Tongue River: Mouth to Wyoming state line.

**Counties:** Custer, Rosebud, Big Horn  
River Mile 0.0 to River Mile 209.5

Bighorn River: Mouth to Two Leggins Diversion Dam

**Counties:** Yellowstone, Big Horn  
River Mile 0.0 to River Mile 53.2

Clarks Fork River: Mouth to the town of Bridger

**Counties:** Yellowstone, Carbon  
River Mile 0.0 to River Mile 45.7

**Is this species legally present in the drainage?**

Yes. Wild sauger exist in low densities in the drainages and river reach proposed for stocking.

**Species of special concern present in the drainage:**

Pallid sturgeon (an endangered species) exist in the Yellowstone River downstream of the project area. Historically, pallid sturgeon were documented at the mouth of Tongue River. Four Montana species of special concern (paddlefish, blue sucker, sturgeon chub and pearl dace) can be found in the Yellowstone River project area. Paddlefish, blue sucker and sturgeon chub have been found in the lower twenty miles of Tongue River but are blocked from further upstream movement by the T & Y Diversion.

**Risks:**

**Potential for impacts on genetic structure of existing fish populations:**

☒ None ☐ Minor ☐ Major

Comments: No impacts are expected. Sauger eggs will be collected from wild adult fish inhabiting the Yellowstone River. Potential spawners will be screened genetically to ensure that gametes from walleye X sauger hybrids are not collected.

**Impacts to any life stages of existing fish populations due to competition and/or predation? ☐ None ☒ Minor ☐ Major**

Comments: Sauger are piscivorous and are native to the area. Other native fish species in the area have co-adapted with sauger. Past survey information indicates that areas proposed for stocking can support substantially higher sauger numbers than currently exist.

**Impacts to other forms of aquatic life that may be caused by this introduction?**

☐ None ☒ Minor ☐ Major

Comments: Sauger will consume mostly other fish.

**If necessary, would it be feasible to remove this species after it has been stocked?**

Not applicable. Sauger are native and already exist in the project area.

**Would this introduction result in impacts that are individually limited, but cumulatively considerable?**

No.

**Describe reasonable and prudent alternatives to this action, if any (including no action).**

- 1) Do not stock sauger.** This is not the preferred alternative because it fails to address the goals of improving the sport fishery and enhancing a native fish species.
- 2) Enhance sauger habitat.** Sauger habitat in the Yellowstone, Tongue River, Bighorn, and Clarks Fork drainages could be greatly enhanced by providing fish passage at diversion dams and insuring that adequate flows are available for all life stages. While this is the preferred alternative, political will and financial resources are not adequate to accomplish this alternative in the short term.

**Describe and evaluate mitigation, stipulations, or other control measures enforceable by the agency, if any.**

This action is intended to enhance depressed populations of a native game fish species.

**List any other agencies or individuals that may be affected by the proposed introduction:**

Licensed Montana and non-resident anglers.

**List all agencies and individuals who have been notified of this proposed introduction:**

Notification via State of Montana electronic bulletin board.

**Based on this evaluation is an EIS required? YES/NO? If no, explain why the EA is the appropriate level of analysis for the proposed action.**

No. Impacts are expected to be minor and action is intended to enhance a native fisheries resource.

**EA prepared by:** Vic Riggs, Fisheries Biologist **Date:** 3/10/2003

**Comments will be accepted until:** April 15, 2003

**Comments should be sent to:** MDFW&P, P.O. Box 1630. Miles City, MT 59301